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REGISTRATION RECORD SERIES  
TEAL SHEETS

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**International Alloy Designations  
and  
Chemical Composition Limits  
for  
Wrought Aluminum and  
Wrought Aluminum Alloys**



1525 Wilson Boulevard, Arlington, VA 22209  
[www.aluminum.org](http://www.aluminum.org)

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# CHEMICAL COMPOSITION LIMITS<sup>1,2</sup> REGISTERED COMPOSITION—Continued

Only composition limits which are identical to those listed herein for a registered designation are applicable to that designation.

Registered International Designation			Si	Fe	Cu	I Mn	Mg	Cr	Ni	Zn	Ti	Ag	B	Bi	Ge	Li	Pb	Sn	V	Zr	OTHERS <sup>13</sup>		Al		
																					No. <sup>14</sup>	Date		By	Each Total <sup>4</sup>
2045	2006	SLOVENIA	0.8	0.8	3.3-4.6	0.50-1.0	0.40-1.8	0.10	0.10	0.8	0.20	0.20-0.7	...	0.05	0.9-1.3	...	...	0.05	0.05-0.14	...	...	0.05	0.15	Rem.	
2050	2004	USA	0.08	0.10	3.2-3.9	0.20-0.50	0.20-0.6	0.05	0.05	0.25	0.10	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.	
2056	2003	FRANCE	0.10	0.12	3.3-4.3	0.10-0.50	0.6-1.4	0.05	...	0.40-0.8	0.15	...	...	...	...	...	...	...	...	...	0.08-0.15	...	0.05	0.15	Rem.
2060	1984	USA	0.10	0.12	2.4-3.0	0.05	0.25	0.05	...	0.10	...	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
2091	1985	FRANCE	0.20	0.30	1.8-2.5	0.10	1.1-1.9	0.10	...	0.25	0.10	...	...	...	...	...	...	...	...	...	0.04-0.16	...	0.05	0.15	Rem.
2094	1990	USA	0.12	0.15	4.4-5.2	0.25	0.25-0.8	...	...	0.25	0.10	0.25-0.6	...	...	...	...	...	...	...	...	0.04-0.18	...	0.05	0.15	Rem.
2095	1990	USA	0.12	0.15	3.9-4.6	0.25	0.25-0.8	...	...	0.25	0.10	0.25-0.6	...	...	...	...	...	...	...	...	0.04-0.18	...	0.05	0.15	Rem.
2195	1992	USA	0.12	0.15	3.7-4.3	0.25	0.25-0.8	...	...	0.25	0.10	0.25-0.6	...	...	...	...	...	...	...	...	0.08-0.15	...	0.05	0.15	Rem.
2196	2000	USA	0.12	0.15	2.5-3.3	0.35	0.25-0.8	...	...	0.35	0.10	0.25-0.6	...	...	...	...	...	...	...	...	0.04-0.18	...	0.05	0.15	Rem.
2097	1993	USA	0.12	0.15	2.5-3.1	0.10-0.6	0.35	...	...	0.35	0.15	...	...	...	...	...	...	...	...	...	0.08-0.16	...	0.05	0.15	Rem.
2197	1993	USA	0.10	0.10	2.5-3.1	0.10-0.50	0.25	...	...	0.05	0.12	...	...	...	...	...	...	...	...	...	0.08-0.15	...	0.05	0.15	Rem.
2297	1997	USA	0.10	0.10	2.5-3.1	0.10-0.50	0.25	...	...	0.05	0.12	...	...	...	...	...	...	...	...	...	0.08-0.15	...	0.05	0.15	Rem.
2297	2002	USA	0.10	0.10	2.5-3.1	0.10-0.50	0.25	...	...	0.05-0.15	0.12	...	...	...	...	...	...	...	...	...	0.08-0.15	...	0.05	0.15	Rem.
2098	2000	USA	0.12	0.15	3.2-3.8	0.35	0.25-0.8	...	...	0.35	0.10	0.25-0.6	...	...	...	...	...	...	...	...	0.04-0.18	...	0.05	0.15	Rem.
2198	2005	USA	0.08	0.10	2.9-3.5	0.50	0.25-0.8	0.05	...	0.35	0.10	0.10-0.50	...	...	...	...	...	...	...	...	0.04-0.18	...	0.05	0.15	Rem.
2099	2003	USA	0.05	0.07	2.4-3.0	0.10-0.50	0.10-0.50	...	...	0.40-0.10	0.10	...	...	...	...	...	...	...	...	...	0.05-0.12	0.0001 Be	0.05	0.15	Rem.
2199	2005	USA	0.05	0.07	2.3-2.9	0.10-0.50	0.05-0.40	...	...	0.20-0.9	0.10	...	...	...	...	...	...	...	...	...	0.05-0.12	0.0001 Be	0.05	0.12	Rem.
3002	1981	USA	0.06	0.10	0.15	0.05-0.25	0.05-0.20	...	...	0.05	0.03	...	...	...	...	...	...	...	...	0.05	...	...	0.03	0.10	Rem.
3102	1972	USA	0.40	0.7	0.10	0.05-0.40	...	...	...	0.30	0.10	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3003	1954	USA	0.6	0.7	0.05-0.20	1.0-1.5	...	...	...	0.10	...	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3103	1972	EEA	0.50	0.7	0.10	0.9-1.5	0.30	0.10	...	0.20	...	...	...	...	...	...	...	...	...	...	...	...	0.03	0.15	Rem.
3103A	1981	NORWAY	0.50	0.7	0.10	0.7-1.4	0.30	0.10	...	0.20	...	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3103B	2002	USA	0.50-1.3	0.8	0.50	0.7-1.3	0.50	...	...	0.50	0.20	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3203	1973	AUSTRALIA	0.5	0.7	0.05	1.0-1.5	...	...	...	0.10	...	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3403	2001	USA	1.3	0.8	0.50	0.8-1.5	0.6	0.10	...	0.40	0.10	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3004	1954	USA	0.30	0.7	0.25	1.0-1.5	0.8-1.3	...	...	0.25	...	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3004A	1985	AUSTRALIA	0.40	0.7	0.25	0.8-1.5	0.8-1.5	0.10	...	0.25	0.05	...	...	...	0.03	...	...	...	...	...	...	...	0.05	0.15	Rem.
3104	1978	USA	0.6	0.8	0.05-0.25	0.8-1.4	0.8-1.3	...	...	0.25	0.10	...	...	...	...	...	...	...	...	0.05	...	...	0.05	0.15	Rem.
3204	1991	USA	0.30	0.7	0.10-0.25	0.8-1.5	0.8-1.5	...	...	0.25	...	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3304	2001	USA	0.7	0.8	0.6	0.8-1.4	0.8-1.4	0.10	...	0.40	0.10	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3005	1954	USA	0.6	0.7	0.30	1.0-1.5	0.20-0.6	0.10	...	0.25	0.10	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3005A	1997	NORWAY	0.7	0.8	0.30	1.0-1.5	0.20-0.6	0.10	...	0.40	0.10	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3105	1980	USA	0.6	0.7	0.30	0.30-0.8	0.20-0.8	0.20	...	0.40	0.10	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3105A	1990	FRANCE	0.6	0.7	0.30	0.30-0.8	0.20-0.8	0.20	...	0.25	0.10	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3105B	1997	NORWAY	0.7	0.9	0.30	0.30-0.8	0.20-0.8	0.20	...	0.50	0.10	...	...	...	0.10	...	...	...	...	...	...	...	0.05	0.15	Rem.
3007	1976	USA	0.50	0.7	0.05-0.30	0.30-0.8	0.6	0.20	...	0.40	0.10	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3107	1977	SPAIN	0.6	0.7	0.05-0.15	0.40-0.9	...	...	...	0.20	0.10	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3207	1979	GERMANY	0.30	0.45	0.10	0.40-0.8	0.10	...	...	0.10	...	...	...	...	...	...	...	...	...	...	...	...	0.05	0.10	Rem.
3207A	1980	NORWAY	0.35	0.6	0.25	0.30-0.8	0.40	0.20	...	0.25	...	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3307	1986	USA	0.6	0.8	0.30	0.50-0.9	0.30	0.20	0.05	0.40	0.10	...	...	...	...	...	...	...	...	...	...	...	0.05	0.15	Rem.
3009	1978	GERMANY	1.0-1.8	0.7	0.10	1.2-1.8	0.10	0.05	...	0.05	0.10	...	...	...	...	...	...	...	...	...	0.10	...	0.05	0.15	Rem.

See footnotes on page 14.